

Natalia Donoho

NESDIS Office of Satellite and Product Operations (OSPO)

Satellite Products and Services Division

College Park, MD

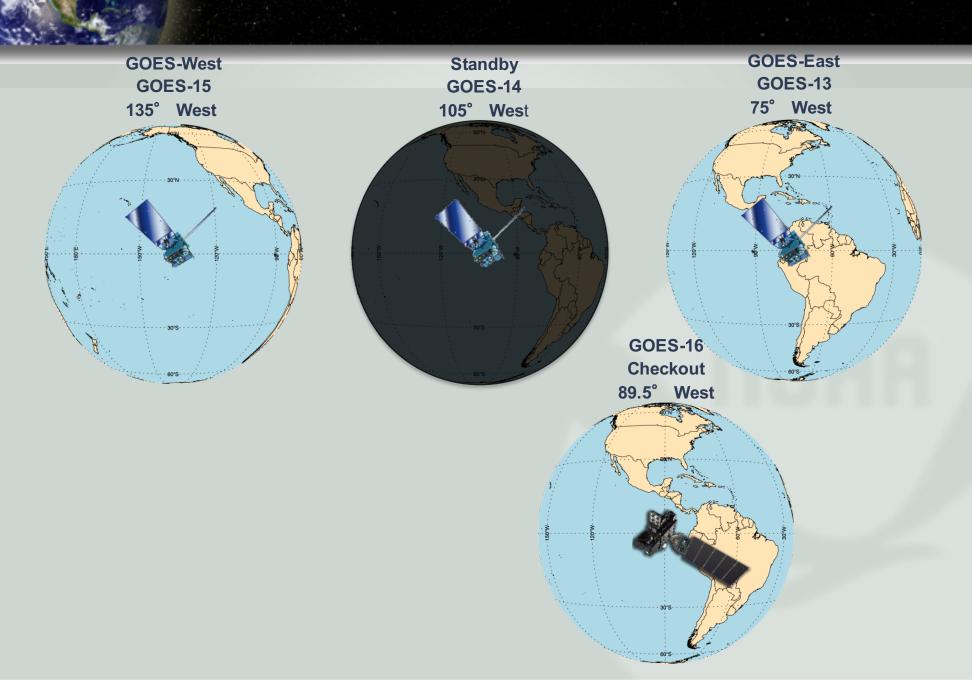
July 17, 2017
2017 NOAA Satellite Conference
City College of New York
New York City, NY

### **GOES Mission**

For the protection and enhancement of the Nation's economy, security, environment, and quality of life...

- Warnings to U.S. public Detect, track and characterize
  - Hurricanes, severe storms including flash floods, winter cyclones
- Imagery for weather forecasting
- Derived products for analysis and forecasting
  - Surface temperatures, wind for aviation and NWS numerical models, sounding and radiances fro NWS models, air quality, rainfall estimates
- Environmental data collection
  - Platforms including buoys, rain gauges, river levels, ecosystem monitoring
- Space Weather Monitoring and Forecasting
- Search and Rescue

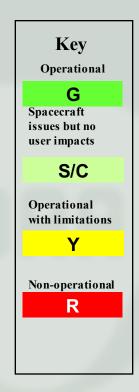
## **GOES Constellation**





### Geostationary Operational Environmental Satellite (GOES) Operations Status July 12, 2017

	GOES-13 (East)	GOES-14 (Standby)	GOES-15 (West )
Payload Instrument	Launch: May 06 Activation: Apr 10	Launch: Jun 09 Activation:	Launch: Mar 10 Activation: Dec 11
Imager	G	G	G
Sounder	R (1)	G	Y (5)
Energetic Particle Sensor (EPS)	G	G	G
Magnetometers	G	G	G
High Energy Proton and Alpha Detector (HEPAD)	G	G	G
X-Ray Sensor (XRS)	Y (2)	G	G
Solar X-Ray Imager (SXI)	Y (3)	G	S/C (6)
Spacecraft Subsystems			
Telemetry, Command & Control	G	G	G
Attitude and Orbit Control	S/C (9)	G	Y (8)
Fuel for Inclination Control	G	G	G
Propulsion	S/C (4)	G	G
Mechanisms	G	G	G
Electrical Power	G	G	G
Thermal Control	G	G	G
Communications Payloads	G	G	S/C (7)

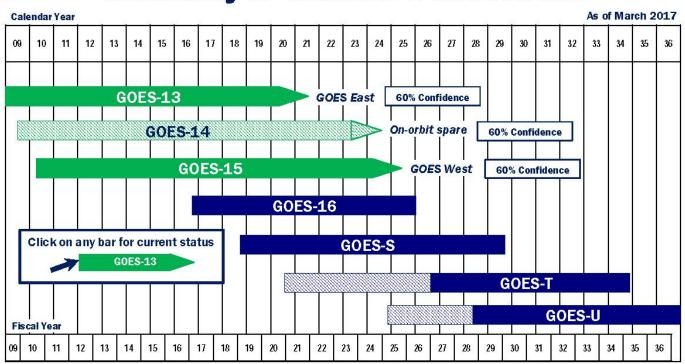


## **GOES Flyout Schedule**



## NOAA Geostationary Satellite Programs Continuity of Weather Observations





 In orbit, operational
In orbit, storage
In orbit, storage
In orbit, storage
Planned Mission Life
Reliability analysis-based extended weather observation life estimate (60% confidence) for satellites on orbit for a minimum of one year – Most recent analysis: March 2017

### **GOES-R Series**



- GOES-R (16, S, T, U) is the NOAA continuity for the western hemisphere component of the space-based GEO Ring observing system (2016-2036)
  - GOES-16:
    - Launch November, 2016; in Post-Launch Test at 89.5 W.
    - Disseminating provisionally validated L1B Cloud and Moisture imagery over GRB and PDA (July 10).
    - Handover to NOAA Operations June 23, 2017.
    - Extended Post-Launch Testing through November.
    - Post-launch software updates are being successfully executed with balanced updates to flight, data, and product operations.
    - GOES-16 will be fully operational as GOES-East in December.
  - GOES-S:
    - Planned launch Spring 2018 to replace GOES-15 at 137 W.
    - 6 months Post-Launch Testing.

### **GOES-16 Status**



- All instruments generating science data.
- Direct broadcast community receiving data via GOES-R Rebroadcast (GRB) signal.
- NOAA/National Weather Service receiving data.
- Calibration/characterization activities underway.
- Data for all six instruments (GLM, SEISS, EXIS, ABI, SUVI, MAG) have been validated at "beta" maturity.

# Advisory on use of GOES-16 data

The data from GOES-16 are still considered preliminary and are undergoing validation testing. NOAA is therefore requesting that any organizations that redistribute GOES-16 data -- before it is declared operational -- include the following disclaimer with the data: "NOAA's GOES-16 satellite has not been declared operational and its data are preliminary and undergoing testing."

Users receiving these data through any dissemination means (including, but not limited to, PDA, GNC-A, HRIT/EMWIN, and GOES Rebroadcast) assume all risk related to their use of GOES-16 data and NOAA disclaims any and all warranties, whether express or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose.

### **Access Points to GOES-16 Data**

#### Direct Readout (requires receiving system)

GRB GOES ReBroadcast

HRIT/EMWIN High Rate Information Transmission/Emergency Managers

Weather Information Network

GNC-A GEONETCast-Americas

#### <u>Terrestrial Access</u>

PDA Product Distribution & Access System

Operational real-time users access exclusively

CLASS Comprehensive Large Array-data Stewardship System

Request and setup access

## **Contact Information**

24/7 Help Desk	ESPCOperations@noaa.gov
ESPC Messages	http://www.ssd.noaa.gov/PS/SATS/messages.html
User Services	SPSD.UserServices@noaa.gov
Data Access	NESDIS.Data.Access@noaa.gov
Webmaster	OSPOWebmaster@noaa.gov
Facebook	www.facebook.com/NOAANESDIS
Twitter	www.twitter.com/noaasatellites
Satellite Ops Status	http://www.ospo.noaa.gov/Operations/GOES/status.html
Schedules and Scan Sectors	http://www.ospo.noaa.gov/Operations/GOES/schedules.html
Press releases	https://www.nesdis.noaa.gov/news-articles-archive
Web	www.ospo.noaa.gov

# Thank you!